

A new species of the genus *Aepiblemus* (Coleoptera: Carabidae)

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Belousov, I.A. & Kabak, I.I. 1997. A new species of the genus *Aepiblemus* (Coleoptera: Carabidae). *Zoosystematica Rossica*, 5(2), 1996: 257-259.

A new species of the formerly monotypical genus *Aepiblemus*, *A. marginalis* sp. n. from Dzhungar Alatau Mts, is described and compared with *A. caeculus* Belousov & Kabak.

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One of the authors (I. Kabak) has collected a small endogean carabid beetle which turned out to represent the second species of the genus *Aepiblemus* earlier believed to be monotypical (Belousov & Kabak, 1993). The present paper contains the description of this new species. Morphometric characteristics are used here as in the authors' previous paper (Belousov & Kabak, 1993).

Aepiblemus marginalis sp. n. (Figs 1, 3, 5-6)

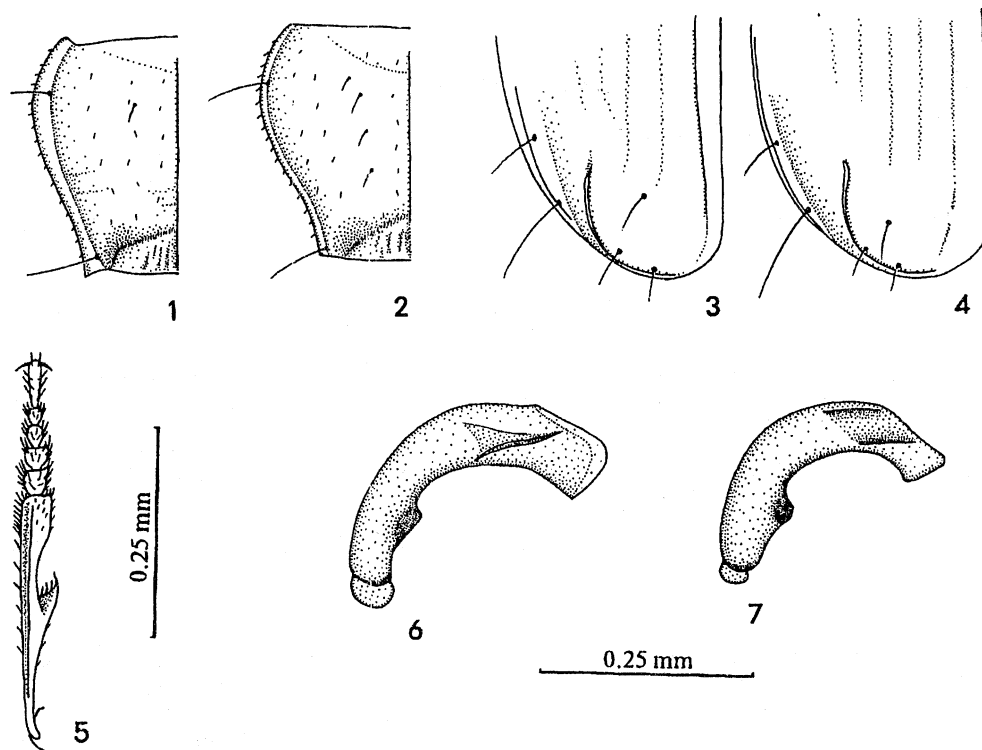
Holotype. ♂, Kazakhstan, northern slope of Dzhungar Alatau Mts, Tentek River, near village Golubev Zapor, 1400 m, deciduous forest, 5.VIII. 1995 (I. Kabak).

Paratypes. 1 ♂, 2 ♀, as holotype.

The holotype is deposited in the Zoological Institute, Russian Academy of Sciences, St.Petersburg; paratypes are retained in the authors' collections.

Description. Small-sized species, body length 2.67-2.92 (average 2.78) mm. Entire body, including sternites, covered with very small, scattered hairs. Colour uniform, testaceous, rather pale. Forebody relatively narrow; elytra rather flat, dilated posteriorly. Apterous. Head large, 1.14-1.20 (1.17) times narrower than pronotum. Eyes entirely lost. Frontal furrows deep and complete, almost parallel at middle; tempora convex, covered with short and suberect pubescence. Labrum transverse, 6-setose, with hardly incised anterior edge. Two clypeal setae on each side of head. Mandibles triangu-

lar and stout, bidentate (pre-molar tooth lacking); retinacle of right mandible bidentate, with very long base and strongly spaced denticles, distal one considerably more salient. Labial palpi swollen; apical segment subcylindrical, more slender than preceding one; penultimate segment 4-setose. Apical segment of maxillary palpi markedly more slender than penultimate one, the latter dilated apically, bearing hardly perceptible microsetae near apex. Antennae of average length, middle antennomeres longer than wide, filiform, 3rd antennomere 1.75-1.90 (1.85) times as long as wide; scapus strongly swollen, moderately curved. Pronotum (Fig. 1) cordiform, 1.22-1.29 (1.25) times as wide as long, with lateral sides strongly sinuate before acute, protruding out- and backwards hind angles; anterior margin of pronotum straight, 1.15-1.25 (1.18) times as wide as base, the latter rectilinear or feebly concave, more or less distinctly excised on sides, 1.48-1.57 (1.52) times narrower than pronotal maximum width. Marginal gutter large and strongly reflexed; anterior angles prominent although somewhat rounded at apices. Pre-basal transverse impression deep but not sharply outlined; surface delimited by it longitudinally rugulose; basal foveae deep. Median line distinct, but not deeply engraved, more strongly impressed near base. Two lateral setae; anterior one in first quarter of pronotum length, posterior one just before hind angles. In addition to fine pubescence,



Figs 1-7. *Aepiblemus*. 1, 3, 5, 6, *A. marginalis* sp. n.; 2, 4, 7, *A. caeculus* Belousov & Kabak. 1-2, pronotum; 3-4, apex of elytron; 5, fore tibia and tarsus of male; 6-7, male genitalia, lateral view.

pronotum bearing two well defined discal setae in its anterior third (Fig. 1). Sides of pronotum shortly ciliated. Scutellum distinct. Elytra subparallel, depressed on disc, broadest far after midlength, 1.39-1.49 (1.44) times as long as wide combined, each elytron rounded separately at apex. Shoulders prominent, although rounded. Borders distinctly ciliated but not denticulated. Lateral gutter of moderate width, distinctly dilated in humeral area. Striation highly superficial, striae 1-3 more or less deep, only stria 1 continuous; exterior striae indistinct; all striae not punctate. Both scutellar and apical strioles present, the latter short, distinctly curved, normally directed straightly anteriorly, to site of stria 5 almost completely reduced here. Apical carina short and obsolete. Intervals flat. Two rather long discal setae on 3rd stria. Discal formula: 14-20(19) / 43-52(49) / 86-88(87) (Pawlowski, 1979). Anterior discal pore situated approximately at level of pores 3 of umbilicate series, normally slightly more distant from base of elytra; posterior one near level of pore 5 of

umbilicate series; subapical one at level of pore 8, about at the same level as anterior end of apical striola (Fig. 3). Humeral group of umbilicate series regular and aggregated, the median one markedly separated from humeral group. Pores 2, 5, 8 of umbilicate series the longest. Apical triangle elongate, apical and subapical pores considerably more distant from each other than from exterior pore. Microsculpture strongly impressed, consisting of almost isodiametric meshes throughout, very regular and deep on head and less regular and more superficial on elytra. Legs relatively slender. Anterior tibiae faintly curved, sparsely pubescent, distinctly grooved externally (Fig. 5). Two proximal segments of male anterior tarsi slightly but acutely dilated and provided with adhesive appendages beneath. Male genitalia (Fig. 6) small, fairly sclerotized; median lobe of aedeagus arched, sagittally compressed, with closed basal bulb and strongly truncated apex. Endophallus armature small but finely delimited, in anisotopos position (Fig. 8).

Diagnosis. The new species differs from *Aepiblemus caeculus* Belousov & Kabak (Belousov & Kabak, 1993) in the on average larger size, less parallel-sided elytra dilated in posterior third, presence of only two discal setae on pronotum, more deeply engraved microsculpture, stria 1 of elytra the most strongly marked, anterior tibia less curved and strongly grooved externally as well as in differing shape of aedeagus apex (Figs 6, 7). The most striking differences however concern the pronotum shape and the position of the subapical pore of elytra: *A. marginalis* sp. n. is easily distinguished from its congener by the wide lateral gutter and prominent anterior angles of pronotum (Figs 1, 2) and by the subapical discal pore placed considerably more anteriorly, near level of the anterior end of the apical striola (Figs 3, 4).

Discussion. The discovery of the new species allows us to precise the genus diagnosis. As for the most essential characters, the new species has only two discal pronotal setae and anterior tibiae are distinctly grooved externally.

Distribution and ecology. This endogean species is known from the gorge of Tentek

River on the northern slope of Dzhungar Alatau Mts, occurring in the forest zone. All specimens were collected in abundant litter taken from under deeply embedded stones.

A. caeculus Belousov & Kabak is widespread over the south of Dzhungar Alatau Mts from the gorge of Kara in the west to upper reaches of Koksuy River in the east. Recently, a male specimen was collected on the northern slope of Koiandytau Range, (Ulken-Koiandy River, SE of Araltobe vill., 2700-3000 m, 9.VI.1991, I. Kabak), extending thereby the species range to south-east. *A. marginalis* sp. n. inhabits mountains north-eastwards of the range of its congener.

References

- Belousov, I.A. & Kabak, I.I. 1993. A new genus of blind beetles of the tribe Trechini from Kazakhstan (Coleoptera: Carabidae). *Zoosyst. ross.*, 2: 137-142.
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Received 29 February 1996